

18 OTHER CEQA-REQUIRED SECTIONS

18.1 GROWTH INDUCING IMPACTS

CEQA §21100(b)(5) specifies that growth inducing impacts of a proposed project must be addressed in an EIR. State CEQA Guidelines §15126.2(d) provides direction to the scope of the analysis. As stated therein, an EIR must “discuss the ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.” This discussion must include projects that would remove obstacles to population growth. The growth inducing impacts of the proposed project are summarized below.

As mentioned in Chapter 17, Alternatives, the Haul Route Alternative may be, but is not required to be, adopted as an additional element of the proposed project in the event that the proposed mine expansion project described in Chapter 2 is approved. Because this alternative has the potential to become an additional element of the proposed project, the growth inducing impacts of this alternative are also summarized in this section.

GROWTH INDUCING IMPACTS OF THE PROPOSED PROJECT

Development of the proposed mine expansion project would not directly or indirectly result in any increase in housing or substantial increases in long-term employment opportunities. Expanded mining operations include grubbing and clearing, extraction of sand and gravel deposits, transport to the processing area, and concurrent reclamation. These operations would use the existing mine-related equipment and personnel, and would not create new employment positions. The proposed project would add up to three long-term employment positions to the approximate 44 full-time employees currently employed at the existing operation. These employment opportunities would be associated with the operation of the asphalt batch plant. Site preparation and construction of the asphalt batch plant would be performed by workers currently employed at the mine.

The proposed project would involve the expansion of mining operations at the Patterson mine site on approximately 365 acres, thereby extending production and sales of sand and gravel materials and other processed products by approximately 30 years. Sand and gravel deposits mined during the operational phase of the proposed mine expansion project would be processed into base rock, gravel products, asphaltic concrete, and other construction materials. These products would be used for construction of roads, sidewalks, parking lots, golf course development (white sand products), and other related development. While the proposed project would make these products available, the project itself would not foster growth because mining production volumes would occur in response to growth rather than inducing growth; production rates would vary according to specific market conditions, as described in Chapter 2, Project Description. In addition, these materials would also be available from other mining operations. Other potential sources of sand and gravel products are identified in Chapter 16, Cumulative Impact Analysis.

The proposed project therefore would not directly induce substantial growth or remove barriers to growth. Rather, the project would provide construction materials to growth-related projects that will have already been approved following their own project-specific environmental and planning review processes.

GROWTH INDUCING IMPACTS OF THE HAUL ROUTE ALTERNATIVE

Under the Haul Route Alternative, a new haul road would be constructed to bypass the town of Sheridan. The construction of approximately 1 mile of new roadway would not generate a substantial amount of population growth or construction of a substantial amount of additional housing. All of the parcels adjacent to the potential new roadways already lie adjacent to public roadways. Nearly all of the parcels are located adjacent to County roads. Two parcels that would be accessed by haul route option 2, however, appear to be accessed only via SR 65, a state highway. High vehicle speeds, potential sight distance hazards, and other constraints can limit the number of feasible site access roads (i.e., driveways) that can be constructed along a state highway. It is conceivable, therefore, that a new Placer County roadway (haul route option 2) could remove an access barrier to development on those two parcels. One of these parcels (19-250-006) measures approximately 22 acres, and the other parcel (19-250-027) measures approximately 9 acres. The Land Use Designation for these parcels is Rural Estate 1 dwelling unit (du)/5–20 acres, and the zoning designation is Farm 20-acre minimum. This zoning designation would not allow residential construction on the 9-acre parcel, and would limit the 22-acre parcel to one new residence. The construction of a new residence would not constitute substantial growth.

18.2 SIGNIFICANT UNAVOIDABLE ENVIRONMENTAL EFFECTS

CEQA §21100(b)(2)(A) provides that an EIR shall include a detailed statement setting forth “[i]n a separate section ... [a]ny significant effects on the environment that cannot be avoided if the project is implemented.” Accordingly, this section provides a summary of significant environmental impacts of the proposed project that cannot be mitigated to a less-than-significant level. Significant unavoidable environmental impacts of the proposed project and cumulative development, as identified in Chapters 4–15 (environmental analyses) and Chapter 16, Cumulative Impact Analysis, respectively, of this EIR, are summarized in this section. This section also summarizes significant unavoidable environmental impacts associated with the Haul Route Alternative, if it is approved by the County Board of Supervisors.

SIGNIFICANT UNAVOIDABLE EFFECTS OF THE PROPOSED PROJECT

Impact 4-1: Conversion of Farmland. Implementation of Mitigation Measure P4-1 would compensate for the loss of agricultural land, and would render the proposed project compliant with SMARA farmland reclamation standards (CCR §§3707–3708). Because it is difficult to recreate the soil and water conditions used to classify state-designated and federally designated Farmland, Mitigation Measures P4-1, R4-1(a) and R4-1(b) are not expected to mitigate the loss of designated Farmland sufficiently to reduce the impact to a less-than-significant level. There are no feasible mitigation measures available to reduce this impact on designated Farmland to a less-than-significant level. This impact is therefore considered *significant and unavoidable*.

Impact 4-2: Land Use Incompatibility. Implementation of Mitigation Measure R4-2 would reduce the likelihood of land use compatibility conflicts between the mine and future development. This mitigation measure, however, would not be expected to reduce all land use compatibility impacts to a less-than-significant level. This impact is therefore considered *significant and unavoidable*.

Impact 8-1: Short-Term Increases in Regional Criteria Pollutants and Precursors. The proposed construction activities on the Patterson mine site would result in PM₁₀ emissions in excess of the significance thresholds for the duration of the proposed construction activities (Impact 8-1). Implementation of Mitigation Measures R8-1(a) through R8-1(e) would reduce fugitive dust impacts, but not to a less-than-significant level. As a result, this impact is considered *significant and unavoidable* for the expansion project as proposed.

Impact 8-2: Long-term Increases in Regional Criteria Pollutants and Precursors. Mining and reclamation activities would generate regional emissions of pollutants that would exceed the significance thresholds for ROG, NO_x, and PM₁₀ (Impact 8-2). Implementation of proposed and recommended mitigation measures would reduce emissions of regional criteria pollutants and precursors. Additional reductions would also occur with implementation of Mitigation Measure R8-7. However, net increases in regional criteria pollutants would not be reduced to a less-than-significant levels. As a result, this impact is considered *significant and unavoidable* for the expansion project as proposed.

Impact 8-4. Localized Concentrations of Nitrogen Dioxide in the Vicinity of the Processing Plant. Implementation of the proposed and recommended mitigation measures would reduce NO_x concentrations at nearby receptors. However, based on the data available, it is unclear whether these mitigated reductions would result in reduced concentrations (in comparison to baseline) or whether predicted mitigated NO_x concentrations would be reduced to below applicable ambient air quality standards. For these reasons, this impact is considered *significant and unavoidable* for the expansion project as proposed.

Impact 8-5. Localized Concentrations of PM₁₀ in the Vicinity of the Processing Plant. Implementation of proposed and recommended mitigation measures would reduce emissions of PM₁₀, but not to a less-than-significant level. As a result, this impact is considered *significant and unavoidable* for the expansion project as proposed.

Impact 8-6. Particulate Deposition on Nearby Agricultural Crops. Implementation of proposed and recommended mitigation measures would reduce emissions of PM₁₀, but not to a less-than-significant level. As a result, this impact is considered *significant and unavoidable* for the expansion project as proposed.

Impact 8-7. Localized Concentrations of Diesel Exhaust Particulate Matter in the Vicinity of the Processing Plant. Additional dispersion model runs were conducted to determine the effectiveness of various mitigation options available to reduce diesel exhaust particulate matter impacts. Based on the modeling conducted for Phases 2 and 3, the mine haul trucks contributed 57.3 percent of the diesel exhaust particulate matter emissions in the Phase 2 mining area, and 52.0 percent of the emissions in the aggregate processing area. Substitution of a conveyor belt for the use of these vehicles in

transporting run-of-pit material to the aggregate processing area, and substitution of an electric motor for the diesel-powered water pump, are estimated to reduce cancer risks associated with diesel exhaust particulate matter by approximately 42 percent (Sierra Research 2002b). Use of CARB-certified diesel-water emulsion fuel (e.g., PuriNOx) would reduce equipment emissions by 63 percent and overall cancer risks associated with diesel exhaust particulate matter cancer by an additional 18 percent (Sierra Research 2002b). Reductions in cancer risk with implementation of available mitigation measures are summarized in Table 8-17.

Table 8-17				
Reductions in Cancer Risk with Implementation of Available Mitigation Measures				
Source	Initial Cancer Risk (µg/m³)	Conveyor & Conversion Reductions (Percent) ¹	Emulsified Diesel Fuel Reductions (Percent) ²	Mitigated Cancer Risk (µg/m³)
Aggregate Processing Area	3.73x10 ⁻⁵	52	63	0.664x10 ⁻⁵
Phase 2 Mining Area	0.629x10 ⁻⁵	57	63	0.100x10 ⁻⁵
Pond Reclamation	0.004x10 ⁻⁵	0	63	0.001x10 ⁻⁵
Diesel Pump	0.322x10 ⁻⁵	100	0	0
Haul Trucks on Public Roads	1.89x10 ⁻⁵	0	0	1.89x10 ⁻⁵
All Sources Combined	6.58x10 ⁻⁵			2.66x10 ⁻⁵
Cancer Risk Threshold	1.0x10 ⁻⁵			
¹ Substitution of a conveyor belt for the use of these vehicles in transporting run-of-pit material to the aggregate processing, and substitution of an electric motor for the diesel-powered water pump.				
² Use of CARB-certified diesel-water emulsion fuel (e.g., PuriNO _x)				
Source: Sierra Research 2002b				

As indicated in Table 8-17, implementation of a conveyor system, conversion of the onsite diesel-powered water pump, and use of a diesel-water emulsion fuel would reduce the cancer risk attributable to onsite sources to a maximum of 0.765×10^{-5} , which is below the threshold recommended by the PCAPCD. However, the overall combined cancer risk at nearby receptors, when including impacts from haul trucks on public roads near the mine, would continue to exceed the threshold level, resulting in a combined cancer risk of 2.66×10^{-5} .

As previously discussed, CARB has identified particulate emissions from diesel-fueled engines (diesel particulate matter) as a TAC. Following this identification process, CARB was required by law to determine whether there is a need for further control, which necessitated the initiation of the risk management phase of the diesel particulate matter program. For the risk management phase, CARB created the Diesel Advisory Committee, which consists of staff from CARB, EPA, state and local agencies, industry representatives, environmental groups, and concerned members of the public. With the assistance of the Diesel Advisory Committee and its subcommittees, CARB developed the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles* (2000a) and the *Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines* (2000b). CARB approved these plans on September 28, 2000 (CARB 2002).

CARB is currently in the process of implementing the control measures identified in the diesel particulate matter program. During this control measure phase, specific statewide regulations designed

to further reduce emissions of diesel particulate matter from diesel-fueled engines and vehicles will be evaluated and developed. The goal of each regulation is to make diesel engines as clean as possible by establishing state-of-the-art technology requirements or emission standards to reduce emissions of diesel particulate matter. Although the diesel particulate matter program is ongoing, there are already existing regulations that mandate lower emissions of particulate matter from new on-road diesel-fueled vehicles. These regulations will require substantial reductions in particulate matter and other emissions from on-road heavy duty diesel-fueled engines beginning with the 2004 model year. Additionally, more stringent standards will apply to engines starting in the 2007 model year because of the adoption of federal standards at the state level, resulting in particulate matter emissions of less than 0.01 gram per brake horsepower hour (gm/bhp-hr) for these types of engines. Off-road vehicles will come under more stringent regulations beginning with the 2005 model year. CARB is currently working on proposed regulations to include a particulate matter reduction requirement, which would require particulate matter emissions to be less than 0.02 gm/bhp-hr for these types of engines. Currently, according to CARB, particulate matter emissions from heavy-duty diesel engines are on the average of approximately 0.1 gm/bhp-hr without controls. In comparison to the reductions achieved with implementation of the upcoming 2004 standards, implementation of the 2007 standards will result in up to an 85 percent reduction in PM emissions from large diesel-powered engines, with overall reductions in diesel PM-related health risks of approximately 70 percent by 2010 (CARB 2002, PCAPCD 2004).

Because health risk is determined based on an extended period of exposure, typically 70 years for the estimation of cancer risk, the predicted health risk impacts attributable to emissions of diesel particulate matter, as presented in this report, could be further offset by reductions in particulate matter emissions resulting from implementation of future regulations on diesel engines. As a result, this impact is considered *significant and unavoidable* for the foreseeable future, although this conclusion could change, if effective, statewide regulatory controls were implemented.

Impact 8-8. Localized Concentrations of Diesel Exhaust Particulate Matter within Sheridan.

Health risk for this impact is determined based on an extended period of exposure, typically 70 years for the estimation of cancer risk. Similar to Impact 8-7 (Localized Concentrations of Diesel Exhaust Particulate Matter in the Vicinity of the Processing Plant), the predicted health risk impacts attributable to emissions of diesel particulate matter, as presented in this report, could be further offset by reductions in particulate matter emissions resulting from implementation of future regulations on diesel engines (see preceding discussion for Impact 8-7). As a result, this impact is also considered *significant and unavoidable* for the foreseeable future, although this conclusion could change, if effective, statewide regulatory controls were implemented.

Impact 8-10. Increases in Detectable Odors at Nearby Receptors. Implementation of the above recommended mitigation measures would reduce emissions of odorous compounds associated with the proposed long-term operation of the facility. However, given the close proximity of expansion Phase 6 and the existing haul route to nearby sensitive receptors, detectable emissions of diesel exhaust would still be anticipated to occur. As a result, this impact is considered *significant and unavoidable* for the expansion project as proposed.

Impact 9-2: Operational Mining and Processing Noise Levels Exceeding Recommended Thresholds. Implementation of Mitigation Measure R9-2 would reduce operational noise levels, such that noticeable increases in ambient noise levels (in comparison to baseline conditions) would not occur at any of the receptors listed in Table 9-8, with the exception of receptor 4. Noise levels with mitigation incorporated are greatly reduced at receptor 4. However, Mitigation Measure R9-2, measures (c) and (d), would not be as effective for this receptor as for other receptors because this receptor's elevated location may still place this residence within the line of sight at times during the mining of Phase 6. Implementation of Mitigation Measure R9-2 would ensure that resultant noise levels at receptors experiencing noticeable increases in ambient noise levels would be below the County's noise criteria for land use compatibility, with the exception of receptor 4 as discussed above. It should be noted that noise levels at some receptors located near the processing plant (i.e., receptors 3 and 10) would continue to experience hourly noise levels in excess of the County's noise criteria. Under baseline conditions, noise levels at these receptors are primarily the result of onsite stationary source noise and haul truck traffic on area roadways. Implementation of the proposed project and Mitigation Measure R9-2 would be predicted to reduce operational noise levels at these receptors. Nevertheless, implementation of Mitigation Measure R9-2 would not reduce all noise levels to below the thresholds of significance; as a result, this impact is considered *significant and unavoidable*.

Impact 16-1: Cumulative Conversion of State-Designated Farmland. Implementation of Mitigation Measure P4-1 would compensate for the loss of agricultural land, and would render the project compliant with SMARA farmland reclamation standards (CCR §§3707–3708). However, neither this mitigation measure nor measures R4-1(a) and/or R4-1(b) would offset the loss of state-designated and federally designated Farmland to a less-than-significant level. There are no feasible mitigation measures available to reduce the contribution of the proposed project to this significant cumulative impact to state-designated and federally designated Farmland to a less than cumulatively considerable level. This impact, therefore, would remain *significant and unavoidable*.

Impact 16-5: Cumulative Air Quality Impacts. Implementation of Mitigation Measures R8-1(a) through R8-11 would reduce the impact of the proposed project with regard to silica emissions to a less-than-significant level, and the proposed project would not contribute at a considerable level to a cumulative impact in this area. Impacts relating to regional criteria pollutants and precursors, concentrations of PM₁₀, particulate deposition on nearby crops, and detectable odors would remain significant and unavoidable. Additionally, if impacts of cumulative projects (in particular, the Teichert Aggregate facility, the SR 65 Lincoln Bypass project, and development in the Plumas Lake Specific Plan area of Yuba County) relating to regional criteria pollutants are not mitigated on a site-specific basis to a less-than-significant level, then a *significant and unavoidable* cumulative impact would exist and the proposed mine expansion project would contribute to that impact.

Impact 17-8: Short-Term Increases in Offsite Emissions of Regional Criteria Pollutants and Precursors. Construction of a new haul road along either proposed alignment would result in PM₁₀ emissions in excess of the significance thresholds. Implementation of Mitigation Measures R17-8(a) through R17-8(c) would reduce fugitive dust impacts, but not to a less-than-significant level. As a result, this impact is considered *significant and unavoidable*.

Impact 17-12: Operational Highway Traffic Noise Levels. With respect to Haul Route Alternative alignment 1, implementation of Mitigation Measure R17-12 would be anticipated to substantially reduce noise levels at existing residences located along alignment 1, as displayed in Exhibit 17-12. Average reductions would range from approximately 5 to 8 dBA, depending on various factors, including distance from the proposed haul route, as well as distance from SR 65. However, exterior noise levels at some nearby noise-sensitive land uses would still be anticipated to exceed the exterior noise standard of 60 dBA CNEL/L_{dn}, specifically residences located just east of SR 65. With respect to alignment 2, implementation of Mitigation Measure R17-12 would be anticipated to reduce interior noise levels at affected residences located along alignment 2 to within normally acceptable levels. However, exterior noise levels at nearby noise-sensitive land uses would still be anticipated to exceed the exterior noise standard of 60 dBA CNEL/L_{dn}. As a result, this impact is considered *significant and unavoidable*.

Impact 17-13: Intermittent Single Event Noise Levels. Implementation of Mitigation Measure R17-13, would reduce the loudness of single event noise levels associated with truck traffic on the alternative haul routes at nearby sensitive receptors. However, impulsive SEL associated with haul trucks along the alternative haul routes during the sensitive nighttime hours would still occur with the same frequency and potential cause sleep disruption. As a result, this impact would be *significant and unavoidable*.

Impact 17-23: Cumulative Air Quality Impacts. If impacts of cumulative projects (in particular, the Teichert Aggregate facility, the SR 65 Lincoln Bypass project, and development in the Plumas Lake Specific Plan area of Yuba County) relating to regional criteria pollutants are not mitigated on a site-specific basis to a less-than-significant level, then a *significant and unavoidable* cumulative impact would exist and construction of a new haul road would contribute to that impact.

18.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA §21100(b)(2)(B) provides that an EIR shall include a detailed statement setting forth “[i]n a separate section ... [a]ny significant effect on the environment that would be irreversible if the project is implemented.” However, a discussion of significant irreversible environmental effects need only be included in EIRs for three types of projects as listed in CEQA §21100.1:

- a) The adoption, amendment, or enactment of a plan, policy, or ordinance of a public agency.
- b) The adoption by local agency formation commission of a resolution making determinations.
- c) A project which will be subject to the requirement for preparing an environmental impact statement pursuant to the requirements of the National Environmental Policy Act of 1969.

Because neither the proposed project nor the Haul Route Alternative is one of the three types of projects for which a discussion of significant irreversible environmental changes is required under CEQA, no analysis of significant irreversible environmental changes is provided in this EIR.